ELANTAS
Electrical Insulation

Technical Data Sheet

Secondary Insulation

Epoxylite® E 230

Two-Component Epoxy Impregnating Resin

ELANTAS PDG, Inc.
5200 North Second Street
St. Louis, MO 63147
USA
Tel +1 314 621-5700
Fax +1 314 436-1030
info.elantas.pdg@altana.com
www.elantas.com

Epoxylite® E 230 Epoxy

Product Description

Epoxylite® E 230 Epoxy is a two-component, low temperature curing, 100%-solids resin system.

Areas of Application

Impregnation of motor and transformer windings including high-speed armatures

Protective overcoat for motor windings

Features and Benefits

- Excellent penetration in trickle application
- High bond strength
- Chemical, refrigerant and moisture resistant
- Fast cure with low heat
- Ideal for appliance motors and other high-speed rotating devices

Application Methods

Trickle
Brush on

Transportation / Storage

Store below 25°C / 77°F in a dry controlled environment out of direct sunlight. This material should be suitable for use stored under these conditions in the original sealed containers for twelve (12) months from the date of shipment.

Failure to store the product as recommended above may lead to deterioration in product performance.

Mix individual components thoroughly before use.

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		Epoxylite® E 230 Resin	**Epoxylite® C 230 Hardener**	
Viscosity	25°C / 77°F	10,000 – 15,000	100 - 500	cP
Weight per Gallon	25°C / 77°F	9.5 – 9.9	8.4 – 8.8	pounds
Flash Point	ASTM D93	248 478	> 94 > 201	°C °F
Mix Ratio	Parts by weight Parts by volume	100 100	20 22.6	

Epoxylite® E 230 Epoxy

Typical Properties of Mixed Materials

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	3,000 - 6,000	cP
Gel Time	25°C / 77°F – 250 grams	15 - 25	minutes

Application / Curing Schedule

Preheat unit to 85 - 95°C / 185 - 203°F

Trickle mixed resin onto unit and allow to gel. Post-cure 15 minutes at 100°C / 212°F. Allow 2 - 7 days to develop full properties.

Alternatively, allow to gel at room temperature and post-cure for 16 hours at 60°C / 140°F.

Cure schedule is based on time after the unit reaches the specified temperature.

Typical Mechanical Properties

Property	Conditions	Value	Units
Helical Coil Bond Strength ASTM D2519 over MW 35	25°C / 77°F 150°C / 302°F	40 4	pounds pounds
Hardness	Shore D	75 - 85	
R-22 Extractable Material	NEMA RE-2	< 1.0	%
Water Absorption	24 hours @ 25°C / 77°F	0.2	%

Typical Electrical Properties

Property	Conditions	Value	Units
Dielectric Strength ASTM D149	25°C / 77°F - 3 mils	1700	volts/mil
Volume Resistivity	ASTM D257 – 25°C / 77°F	1.1×10^{15}	ohm-cm
Dielectric Constant	1 kHz – 25°C / 77°F	3.8	
Dissipation Factor	1 kHz – 25°C / 77°F	0.03	

The above properties are typical values and are not intended for specification use.